

ABSTRACT OF THE DISCLOSURE

A semiconductor memory device includes a memory cell, a side wall insulating film, and an interlayer insulating film. A memory cell includes a first
5 ferromagnetic film, a tunnel barrier film formed on the first ferromagnetic film, and a second ferromagnetic film formed on the tunnel barrier film. The side wall insulating film is formed so as to surround at least sides of the second ferromagnetic film. The interlayer
10 insulating film is formed so as to cover the memory cell and the side wall insulating film.